

In the claims kindly amend as follows:

1.(Amended) A method for routing at least one critical conductor in an integrated circuit design comprising the steps of:

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providing a plurality of logic signals which are communicated by said at least one critical conductor;

determining that at least one conductor is a critical conductor to protect from inductive coupling or capacitive coupling from at least one adjacent conductor;

determining the location of at least one preferred track, said preferred track adjacent to a constant voltage conductor;

routing said at least one critical conductor into said at least one preferred track; and

protecting said plurality of logic signals communicated by said at least one conductor from inductive coupling or capacitive coupling by routing said at least one critical conductor.

2.(Amended) The method of claim 1 further comprising the step of:

ranking each of said at least one critical conductor in order of importance relative to other critical conductors; and

wherein said routing step further includes the step of routing said ranked critical conductor, according to said ranking.

3.(Amended) The method of claim 2 further comprising the step of:

ranking said at least one preferred track location according to whether said at least one preferred track location are adjacent to at least one constant voltage conductor; and

wherein said routing step further includes the step of routing said ranked at least one critical conductor, according to said track location ranking, and said at least one critical conductor ranking.

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4.(Amended) A computer system for routing conductors in an integrated circuit design, the computer system comprising:

a processor; and

a memory operatively coupled to said processor having stored therein the following:

means for providing a plurality of logic signals which are communicated by said at least one conductor;

means for determining the number of critical conductors to protect from inductive coupling or capacitive coupling from at least one adjacent conductor;

means for determining the location of at least one preferred track, said preferred track adjacent to a constant voltage conductor;

means for routing said at least one critical conductor into said at least one preferred track; and

means for protecting said plurality of logic signal communicated by said at least one conductor from inductive coupling or capacitive coupling by routing said at least one critical conductor.

5.(Amended) The computer system according to claim 4, the memory further having stored therein the following:

means for ranking each of said at least one critical conductor in order of importance relative to other critical conductors; and

means for routing said ranked critical conductors, according to said ranking.

6.(Amended) The computer system according to claim 4, the memory further having stored therein the following:

means for ranking said at least one preferred track location according to whether said at least one preferred track locations are adjacent to one or more constant voltage conductors; and

means for routing said ranked critical conductors, according to said track location ranking, and said critical conductor ranking.

7.(Amended) A machine-readable medium disposed on a computer to perform a method for routing at least one critical conductor in an integrated circuit design, the method comprising the steps of:

providing a plurality of logic signals which are communicated by said at least one critical conductor;

determining the number of critical conductors to protect from inductive coupling or capacitive coupling from at least one adjacent conductor;

determining the location of at least one preferred track, said preferred track adjacent to a constant voltage conductor;

routing said at least one critical conductor into said at least one preferred track; and

protecting said plurality of logic signals communicated by said at least one conductor from inductive coupling or capacitive coupling by routing said at least one critical conductor.

8.(Amended) The machine-readable medium of claim 7, the method therein further comprising the step of:

ranking each of said at least one critical conductor in order of importance relative to other critical conductors; and

wherein said routing step further includes the step of routing said ranked critical conductors, according to said ranking.

9.(Amended) The machine-readable medium of claim 8, the method therein further comprising the step of:

ranking said at least one preferred track location according to whether said at least one preferred track location are adjacent to at least one constant voltage conductor; and

wherein said routing step further includes the step of routing said ranked critical conductors, according to said track location ranking and said critical conductor ranking.
